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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/665,102	09/18/2003	Marcello Demi	088.037000	6178

23445 7590 02/05/2007  
THE BILICKI LAW FIRM, PC  
1285 North Main Street  
JAMESTOWN, NY 14701

EXAMINER
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CARTER, AARON W

ART UNIT	PAPER NUMBER
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2624

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	02/05/2007	PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

**Office Action Summary**

Application No.

10/665,102

Applicant(s)

DEMI ET AL.

Examiner

Aaron W. Carter

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 09 January 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-15 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1 and 2 is/are allowed.
- 6) ☒ Claim(s) 3-15 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 18 September 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date <u>1/9/04</u> . | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### *Specification*

1. Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "**said**," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

The disclosure is objected to because of the following informalities:

2. The Abstract contains the term "said" on several occasions.
3. Under the section titled "Brief Description of the Drawings", a description of Figures 7b and 7c are missing.

Appropriate correction is required.

### *Claim Objections*

4. Claims 4 and 6 are objected to because of the following informalities:

As to claim 4, the limitations of the claim state a "Method according to claims 3 and 4", claim 4 can not be dependent upon claim 4 and the Examiner will treat the claim as though it is only dependent upon claim 3.

As to claim 6, the limitations of the claim states "Method according to claim 6", claim 6 can not be dependent upon claim 6 and the Examiner will treat the claim as though it is dependent upon claim 5.

Appropriate correction is required.

***Claim Rejections - 35 USC § 112***

5. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 3-15 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 3 recites the limitation "*k*" and "*l*" in lines 4, 11 and 15. There is insufficient antecedent basis for these limitations in the claim.

Claim 4 recites the limitation "said absolute generalized central moment" in line 2.

There is insufficient antecedent basis for this limitation in the claim.

Claim 5 recites the limitation "the absolute generalized central moment" in lines 2, 12 and 14. There is insufficient antecedent basis for this limitation in the claim.

Claim 5 recites the limitation "said discontinuity" in line 16. There is insufficient antecedent basis for this limitation in the claim.

Claim 5 recites the limitation "the two positive  $e_p(n,m)$ " in line 18-19. There is insufficient antecedent basis for this limitation in the claim.

Claim 8 recites the limitation "the central absolute moment" in lines 3-4. There is insufficient antecedent basis for this limitation in the claim.

Regarding claim 9, the phrase "etc" renders the claim(s) indefinite because the claim(s) include(s) elements not actually disclosed (those encompassed by "etc"), thereby rendering the scope of the claim(s) unascertainable. See MPEP § 2173.05(d).

Claim 11 recites the limitation "generalized absolute central moment" in lines 2-3 and 5-6. There is insufficient antecedent basis for this limitation in the claim.

Regarding claim 12, the limitations of the claim disclose an apparatus and the method of claim 1 for using the apparatus and is therefore indefinite. See MPEP § 2173.05(p) II, which state “a single claim which claims both an apparatus and the method steps of using the apparatus is indefinite under 35 U.S.C. 112, second paragraph”.

Claim 15 recites the limitation "said bidemsional convolutors" in line1-2. There is insufficient antecedent basis for this limitation in the claim.

***Allowable Subject Matter***

6. Claims 1 and 2 are allowed.

Claim 12 would be allowable if rewritten or amended to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action.

Claims 3-11 and 13-15 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

The following is an examiner's statement of reasons for allowance:

7. As to claim 1, none of the prior art teach or fairly suggests the limitation of “determining for each n,m a local mean calculated on a neighborhood about a pixel of coordinates n,m of the

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starting image, obtaining a first filtered image”, in combination with the other limitations of the claims. The prior art found in the article entitled “The First Order, Absolute Moment in Low-Level Image Processing” to Demi et al., already of record, discloses detecting and tracking the contour of a starting image including a process for filtering the starting image through an absolute central moment, see section 2. However, Demi et al. does not teach that during the process of filtering an image through an absolute central moment, determining for each  $n,m$  a local mean calculated on a neighborhood about a pixel of coordinates  $n,m$  of the starting image, obtaining a first filtered image, as disclosed in the limitations of claim 1.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled “Comments on Statement of Reasons for Allowance.”

### ***Conclusion***

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

US 2002/0104891 to Otto discloses contour tracking using an absolute central moment filter.

US 2005/0074140 to Grasso et al. discloses contour tracking using an absolute central moment filter.

US 2006/0064016 to Demi et al. discloses contour tracking using an absolute central moment filter.

USPN 6,611,609 to Zhu discloses contour tracking using an absolute central moment filter.

USPN 6,888,564 to Caviades et al. discloses contour tracking using an absolute central moment filter.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Aaron W. Carter whose telephone number is (571) 272-7445. The examiner can normally be reached on 8am - 4:30 am (Mon. - Fri.).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Bhavesh Mehta can be reached on (571) 272-7453. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

AWC  
*[Signature]*

*[Signature]*  
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SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2600